

Coverage under Old-Age Security Programs and Protection for the Uninsured — What Are the Issues?

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The shift toward social security systems with a tighter link between benefits and contributions will make such systems more fiscally sustainable. But to protect the uninsured and underinsured, such programs should be complemented by better social assistance programs for low-income groups.

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Summary findings

Most old people in developing countries are uninsured by formal social security programs. Economic growth is the key to increased coverage, but policy also matters, argues James.

Contributory insurance programs may not work for much of the population in developing economies.

Moreover, the tradeoffs between higher take-home pay and old-age benefits, between maximizing coverage and minimizing evasion, and between increased coverage and greater competitiveness, must be carefully evaluated before opting for expanded coverage, especially among low-income groups.

Keeping the contribution rate low and including some redistribution toward low-income groups in contributory systems may help reduce the number of uninsured, while avoiding costly tradeoffs.

Recent years have seen a tighter link between benefits and contributions in contributory systems — most obviously in the shift toward multipillar systems with large defined-contribution components, usually accompanied by a modest redistributive public pillar. This tighter link makes social security systems more fiscally sustainable and may be considered a precondition for financially sound expansion of coverage.

At the same time, the number of uninsured or underinsured (who have contributed only small amounts) could increase, as a result of the tighter benefit-contribution link.

The uninsured fall into two groups:

- Workers who spend much of their lives in agriculture or the informal sector (often self-employed or in small firms), in jobs not covered by contributory programs. Many of these workers are low earners, for whom contributing today for potential old-age benefits may not be welfare-enhancing — and governments do not have the capacity to compel contributions. Social security reforms that make benefits contingent on contributions should include better social assistance programs for these low-income groups. Efficient program design and program costs must also be considered.
- Women who, having worked mostly in the household, expect to be supported by the family system, which may fail them in old age. Family support for dependent spouses should be incorporated into the pay-out phase of the defined-contribution pillar, to keep old women out of poverty.

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FOR THE UNINSURED—WHAT ARE THE ISSUES?**

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COVERAGE UNDER OLD AGE SECURITY PROGRAMS AND PROTECTION FOR THE UNINSURED—WHAT ARE THE ISSUES?

This is a most important issue for those of us concerned about developing economies, because the majority of workers and old people in these countries are uninsured by formal social security programs. Coverage ranges from less than 10% in Sub-Saharan Africa and South Asia and less than 30% in most of East Asia, to 50-60% in the middle income countries of South America, 70-80% in the Eastern European transition economies and 90-100% in the small group of OECD countries (World Bank, 1994). This paper argues that:

- economic development is the major determinant of coverage rate but policies chosen by governments also matter—for example a low contribution rate and high rate of return may encourage compliance;
- recent social security reforms may increase the degree of insurance for some workers but decrease it for others;
- coverage under a contributory program may not be feasible or desirable for large portions of the population in developing economies,
- systems that link contributions with benefits should be accompanied by social assistance that redistributes to the lowest income groups among informal sector workers who are outside the contributory schemes and
- family support for dependent spouses should be incorporated into the design of the contributory schemes.

To start: Countries have dealt with old age security in three alternative ways, that have differing impacts on the prevalence of the uninsured:

- A universal social security system (or first pillar in a multi-pillar system) that delinks benefits and contributions and covers everyone; i.e. there are no uninsured.
- A contributory social security system that closely links benefits and contributions, thereby creating a class that has not contributed and is not insured.
- The most traditional system, the family, which often insures its members and still has a supplementary role to play in the presence of formal public and private systems.

As discussed in Part I, in recent years we observe a shift away from the first alternative and toward the second--a tighter link between benefits and contributions--most obviously in the shift toward multi-pillar systems with a large defined contribution component. This augments the fiscal sustainability of social security systems and therefore may be considered a pre-condition for financially sound coverage expansion. At the same time, ironically, it runs the risk of increasing the number of uninsured or partially insured. While compliance among long term workers may rise, it may fall among those who no longer receive windfall gains. Moreover, those who have only contributed small amounts receive small benefits and in this sense are only partially insured.

We argue that contributory insurance for many of these workers, particularly for low income workers, is neither feasible nor desirable. If the contribution rate is borne by

workers, it may reduce their take-home pay at a point in the life cycle when they need more income rather than less; and if borne by employers it may reduce the number of jobs in the economy. If efforts are made to increase nominal coverage for these workers, under a scheme where benefits closely depend on contributions, the result may be greater evasion rather than greater effective coverage.

The uninsured fall into two main groups: workers who have labor market jobs that are not covered by contributory programs (e.g. the self-employed, the informal sector); and women, who have worked in the household rather than the labor market for most of their lives, expecting to be supported by the family system, which may fail them in old age. For the first group, social security reforms that make benefits contingent on contributions have been or should be accompanied by enhanced social assistance programs targeted toward low income groups—creating the need to design such programs efficiently and take their costs into account in planning the reform. For the second group, consideration should be given to designing the pay-out phase of the defined contribution pillar so that it provides lifetime income to dependent spouses to keep them out of poverty.

These issues concerning informal sector workers and women are discussed in Parts II and III. They are salient issues in many Latin American countries, which have just gone through the first wave of social security reforms and are now ready for the second stage—fine-tuning and reforming the reforms. The Conclusion summarizes policy implications.

I. How Social Security Creates a Class of Uninsured

Universal benefits—no uninsured

Some countries do not have a problem of “uninsured old” because they have universal flat (uniform) or very broad means-tested old age security benefits. These include many OECD countries, such as the Netherlands, Denmark, Norway, Canada, New Zealand and Australia. In these countries, employment and contributions are not required for inclusion. Instead, the old age benefit is typically financed out of general revenues and all residents are eligible to receive it once they reach the specified age. This approach solves the problem of coverage since there are no uninsured and it eliminates poverty in old age so long as the benefit is above the poverty line.

However, it poses several other problems, chief among them being fiscal problems. Universal old age benefits are costly and as populations age they become more costly. To finance these benefits either requires a large increase in tax rates, which may be distortionary, or a cut in other important social programs. This approach also poses political economy problems, stemming from the need to reach a collective agreement on the level of the uniform benefit and how it should be financed.

Are universal uniform general-revenue-financed old age benefits, for a traditional social security system or for the first pillar of a multi-pillar system, a good option for developing countries? Recently Bolivia established such a first pillar in the form of the “bonosol,” a universal benefit financed from the proceeds of a “collective capitalization

fund” that contains the government’s shares of state enterprises that are in the process of being privatized. The benefit initially was slated to be 11% of the average wage; 50-85% of the income of poor workers (Queisser, 1998, von Gersdorff, 1997). However, it was quickly cut and it is even less clear what will happen when the capitalization fund is exhausted. Probably for most developing countries, a universal old age benefit is a luxury they cannot afford, nor is it the best use for their limited public resources.

The great income inequality in developing countries also makes a universal uniform benefit implausible, because it would be hard to reach a collective decision on its size and method of financing. When income is unequal, a uniform benefit that is reasonable from the point of a poor worker would be negligible for a rich worker who would therefore be uninterested in supporting it. But a benefit that is high enough for the rich worker would exceed the wage level of a poor worker, and would be very expensive for the economy as a whole. Relatedly, when incomes are very unequal, typically only a minority of people pay general taxes, and these people would oppose financing a universal benefit—making it infeasible from a political economy point of view. Bolivia, where incomes are very unequal, tried to avoid these problem by using proceeds associated with a privatization program, but it is not clear that the bonosol will last. Note that the OECD countries with universal benefits all have a high degree of income equality.

Contributory systems: the development of the uninsured

Most countries, including almost all developing countries, finance old age security through earmarked taxes, called “contributions” rather than through general revenue finance. The programs are for those who make contributions rather than being universal, and the benefits they pay depend on the level of contributions. This emphasis on contributory systems, financed by earmarked taxes rather than general revenue finance, with benefits contingent on contributions, is used to increase the public’s willingness to pay and to decrease distortionary evasive techniques. But it has the side-effect of creating a class of uninsured or partially insured individuals who have contributed little or nothing in their working years and may be left in poverty in old age.

Why are most social security schemes contributory, financed by earmarked taxes? When an individual pays general taxes, he or she does not know exactly what benefits will be received in return. In some countries the majority of people may feel that a dollar’s worth of taxes does not buy them a dollar’s worth of benefits, because of government waste, debts from the past that do not generate current benefits, or inefficient spending patterns. Generally, access to public benefits is not contingent on whether or how much taxes have been paid by the individual; hence the incentive is to pay little and to hide sources of taxable income. In addition, some general tax revenues may be spent on deliberate redistribution among population groups. In this case, those who are redistributed against have an additional reason to oppose high tax rates.

This lack of connection between taxes and benefits under general revenue finance sets both economic and political limits on the amount of general taxes people are willing to pay. The economic limit takes the form of evasion and distortion of incentives to work,

save and allocate resources efficiently. The political limit takes the form of collective actions (voting, lobbying) that prevent the government from raising general tax rates beyond a certain point. These limits may differ from country to country, depending on its economic and political culture, but each country has such limits.

An earmarked tax or contributory program is designed to extend the frontiers on these economic and political limits. The basic idea is that when taxes are earmarked for particular benefits, people will perceive them as a price for a desired service, and will be willing to pay this price over and above their general tax obligations, with less incentive to evade. In addition, earmarked taxes tied to particular benefits become a means of visibly limiting redistribution or changing the direction of redistribution in a more politically acceptable way. For both reasons, they allow the government to extend its tax and spending frontier. They are used, in particular, for the financing of services such as education, medical care and old age insurance, that are quasi-public or private in the sense that exclusion is possible, rather than for public goods of which everyone automatically partakes. People who do not contribute do not get access to these services, and the amount you contribute may determine how much benefit you receive, thereby making the system more fiscally sustainable and less distortionary.

In theory and rhetoric, in most countries social security benefits are tied to specific taxes that people pay, although in reality this link has often been broken in non-transparent ways. Indeed, many of the problems faced by traditional pay-as-you-go defined benefit social security systems in Latin America stemmed from the weak linkage between benefits and contributions (easy eligibility, lax disability, early retirement, excessively high rates of return) that was both inequitable and financially unsustainable. The obligations of these systems far exceeded their earmarked revenues. A major objective of the recent wave of multi-pillar reforms, which include a funded defined contribution pillar, has been to tie benefits more closely to earmarked contributions. Hopefully this will facilitate tax collection, although for reasons given below the compliance effect may be low. Regardless of whether it affects evasion, it should at least enable revenues to cover obligations and hence make the system more sustainable for those who do participate.

Why the payroll tax base for old age security? The earmarked tax for old age security programs is usually based on the wage bill, commonly with ceilings and occasionally with floors. That is, the returns to capital are not taxed to finance these programs, nor is property taxed. One rationale for a payroll base is that pensions in old age are designed to replace wages that people receive when they are able to work, hence the amount both of taxes and benefits should be tied to wages. However, it should be noted that this connection to wages is not inevitable. For example, in countries that finance universal programs out of general revenues, capital as well as labor is taxed. Unless the benefit also increases for holders of capital, this makes the programs more redistributive. People who will be redistributed away from will oppose this financing method, giving us a second, political economy, reason for its infrequent use.

A third and more pragmatic reason for payroll tax finance is that such deductions are the easiest way administratively to reach large segments of the population, who do not file income tax returns in many countries. A sales or value added tax would also be administratively feasible, but would make it more difficult to keep track of the taxes paid by each individual, hence to connect benefits and contributions. Payroll tax finance is administratively easy—both for collection and for record-keeping purposes.

The consequence: uncovered groups without formal labor market experience. While possibly ameliorating the political and economic limits to taxation and government spending, contributory programs based on earmarked payroll taxes create a problem that did not exist under universal programs—they create a distinction between covered and non-covered groups that depends on labor market experience. The uncovered group consists of two subsets:

- those who have little or no labor market experience (primarily women) and
- those with labor market experience, but in “informal sector” jobs, where contributions were not collected.

Somewhat different analyses applies to these two groups: Women presumably expect their monetary needs to be met through the family system, so they work in the household, without earning wages or pension rights. Their problem is that this expectation of their youth may not be realized when they grow old. Workers in the informal sector earn wages to satisfy their monetary needs when young, but fail to accumulate pension rights that will provide an income when they grow old. In the second half of this paper I discuss the remedies that may be appropriate to solve the problem of old age poverty in each of these groups.

The trend toward a closer benefit-contribution link and its impact on the uninsured

Social security reforms in recent years have featured a strengthening of the benefit-contribution link. These reforms, we expect, will have beneficial effects on the fiscal sustainability of the systems and will reduce their distortionary labor market effects (especially the impact on early retirement). But they may have unintended effects on coverage. On the one hand, they may encourage compliance among long term workers, but on the other hand they may discourage compliance among those who no longer receive windfall gains and reduce benefits substantially for those who contribute for only part of their working lives, thereby increasing the number of uninsured or partially insured in old age. I will give several sets of examples, from Latin American and OECD countries.

The multi-pillar systems that have been springing up over most of Latin America include a public pillar that is redistributive and often general-revenue financed. However, it usually applies only to those who contribute to the second pillar; it redistributes to the low income groups among those who have contributed. If both the first and second pillars apply only to workers who have contributed, this sets up a distinction between the insured and non-insured and allows old age poverty to develop among the uninsured.

Also, if benefits depend on amount and years of contributions, this sets up a category we might call the “partially insured” who receive only meager pensions.

For example, Chile provides a minimum pension guarantee of 25% of the average wage to workers who have contributed at least 20 years to their individual accounts in the second pillar, and many other countries have followed this example. Accumulations in the second pillar are supplemented by the government to bring the annual benefit to this level. This guarantee will protect low income covered workers, especially those who have contributed for only 20 years. It provides an incentive for low income workers to stay in the system for 20 years—and to evade thereafter (a guarantee that increased with years of contributions might have been more efficient and egalitarian). Because of this incentive, many workers may indeed strive to attain the 20 year minimum. But certain groups, such as the self-employed, are simply not eligible for coverage, and some women may, by custom or labor market structure, lack access to jobs outside of the household. A smaller social assistance benefit, about 12% of the average wage, is provided to the poorest among these groups (World Bank, 1994).

The Brazilian social security system has long included an “age” pension which, at a specified age (65 and 60 for urban men and women, 60 and 55 for rural men and women, respectively), pays 70% of the wage base to workers who have contributed for at least 5 years. The typical pension was one minimum salary, about 30% of the average wage. The Brazilian system also included a much more generous pension based on length of service, that required thirty years of covered employment and paid 5-6 minimum salaries to the average beneficiary. The “length of service” pension went mainly to urban men who worked in the formal labor force for most of their lives. The age pension went mainly to women, especially rural women. For example, in 1997 out of 5.2 million recipients of the age pension, 75% were rural dwellers and 62% were women, while 83% of the 2.9 million recipients of the length of service pensions were urban men (Instituto Nacional do Seguro Social, 1998).

Because of its low employment requirement, the age pension was a form of near-universal redistributive social assistance, targeted toward rural areas and women. However (as a consequence of this and other features), Brazil faces severe fiscal problems in its social security system, as benefits exceed contributions, and evasion problems as workers were increasingly tempted to escape to the informal sector, cease contributing, and collect the age pension. As part of the reform process that began in the mid 1990’s and is on-going today, the contribution requirement for the age pension will gradually increase to fifteen years (World Bank, 1998). This change will likely improve compliance and sustainability, but rural women and others who do not have a chance to participate in the formal labor market for fifteen years may become destitute.

As another example, Uruguay previously had an age pension that required 10 years of covered employment, but the required contributory period was raised to 15 years in Uruguay’s recent pension reform (Queisser, 1998; Law 16.713, Capitulo II, Article 68). Undoubtedly this will have the same beneficial effects on fiscal sustainability, but the fate of the uninsured is unclear. Means-tested assistance outside of the contributory plan is

likely to increase, but in most cases this projected increase has not been taken into account while planning the reform.

In recent years several OECD countries have replaced their single pillar universal systems with multi-pillar systems, because of the growing fiscal strain. That is, the universal defined benefit, in reduced form, has become the first pillar while a second mandatory pillar that is contributory, funded and privately managed has been added. In these countries, the second pillar generally builds on pre-existing plans established by collective bargaining and now extended by government. Given this history, union and/or employer trustees play an important role in managing the assets in the second pillar. The existence of the second contributory pillar permits cutbacks in the size of benefits from the first universal pillar, but it also creates a new problem of the "partially uninsured." Commonly, this has been addressed by offering larger means-tested benefits for those who are not in or who receive only small benefits from the contributory second pillar.

For example, Denmark recently decided gradually to raise contributions to funded occupational defined contribution plans (its second pillar) to 9-12% of wages, which should eventually provide a replacement rate of 45%, and decrease the size of the universal flat benefit (its first pillar) to 25% of the average wage. Of course, this means that those with limited employment experience (women, self-employed, farmers) will receive smaller benefits than others in their cohort and less than they would have previously. In this sense, they are only partially insured. To offset this, the government will offer a means-tested benefit to those without second pillar pensions. So, it is supplementing the first (public universal) pillar with a second (private contributory) pillar on the one hand and a means-tested "zero" pillar for the partially insured, on the other hand (Ploug 1993 and discussions with author, 1998).

Australia, too, added a mandatory occupational saving pillar that will cut demands on its universal means and asset-tested age pension, but the latter remains for those who do not accumulate enough in the second pillar (Bateman and Piggott, 1998). The UK has decreased the value of its flat basic pension relative to the average wage, and increased the role both of private defined contribution pensions and public means-tested supplements (Johnson, 1998; Whitehouse, 1998).

A major issue in all reforming countries is what to do about those groups who have not contributed for long enough to qualify for adequate benefits from the contributory program, as the benefit-contribution link increases. This issue is particularly great in developing countries because of the large size of the informal sector and the low labor force participation rate of women.

II. Noninsured Workers in the Informal Sector

Why increased coverage is not the solution in the short run

Although earmarked taxes and defined contribution plans for old age security are used to increase peoples' willingness to pay and to decrease evasion, they do not completely

succeed in this goal, for a number of reasons. The most basic reason is that not everyone wants the particular service being supplied. In the case of old age pensions, indeed, one reason for public intervention is that people may be myopic or may think they can fall back on public charity if they don't contribute; if not for these problems, the private market might suffice. The government mandate is designed to overcome these problems of myopia and moral hazard. But it still leaves the government with a large enforcement problem, as workers try to evade payments. Governments in developing countries often lack the necessary enforcement capabilities. Thus they face a trade-off between maximizing nominal coverage and minimizing evasion—which is a contagious social disease.

Moreover, even if increased effective coverage were feasible, it might not be desirable. Some workers are better off outside the formal retirement old age security system, with higher take-home pay, which would be reduced by social security contributions. Policy-makers thus face a trade-off between higher coverage and higher current consumption. And if the burden of the contributions falls on employers instead of workers, it raises labor costs, reducing international competitiveness and employment. In this case, governments face a trade off between maximizing coverage and maximizing employment. This trade-off may be decreased and coverage increased if a low target replacement rate and required contribution rate are chosen.

Rational reasons for non-participation among the poor. In addition to myopia, low income workers may have perfectly rational utility-maximizing reasons for preferring to stay out of the old age system and for evading contributions if they are nominally covered. They have relatively short expected lifetimes, so it may make more sense for them to use their meager incomes to survive at present rather than saving for the distant future, when they may not be alive. This effect is accentuated if, at the annuities stage, they are merged with high income workers who have greater expected longevity, thereby depressing benefits and returns for the poor.

Moreover, even when they save, the best rate of return for them may come from investing in land, homes, tools, or the education of their children, who will return the loan by supporting them in the future. In most low and middle income countries, older people live in multi-generational households and their consumptions levels therefore depend on the earnings of their children more than their own pensions. Investing in the human capital of their children or in a family business may be the best old age security program for them. Lacking access to well functioning credit markets and facing exceedingly high borrowing rates, farmers, the self-employed and low income groups generally are forced to use personal savings to finance these investments. They may, understandably, be reluctant to lock up their modest savings in a long term retirement program that will not be available to meet shorter term investment, educational, health or other emergency needs. This objection holds during both the accumulation and the pay-out stages, if gradual withdrawals are required. Permitting borrowing against retirement funds or lump sum withdrawals upon retirement might diminish this resistance—but these depleted accounts might never be replenished and lump sums might be quickly spent, defeating the original purpose of the old age program.

Consistent with this hypothesis, a study of contributions patterns in Peru showed that the self-employed, farmers and low income workers are less likely to contribute regularly (Queisser, 1998). Empirical evidence from savings programs targeted to the poor in Mexico and Indonesia show that these groups will indeed save, but they place a high value on liquidity and therefore choose short rather than long term financial instruments. Moreover, such savings are invariably small, much less than needed for old age security (Aportela, 1999). Extending coverage by requiring low income informal sector workers to contribute to social security would not be in the best interests of these workers in such circumstances, even if the government had the capacity to enforce the mandate. Workers may be made worse off by covering them because current take-home pay combined with liquid short term investments have a greater value to them than future retirement benefits, which they may never live to receive.

Furthermore, the pension tax may be part of a larger package with other taxes and benefits that have even less value to workers. In this case, the package as a whole may be worth less than its combined cost, even if benefits outweigh contributions for the pension part alone. Breaking up the package may then facilitate old age coverage (but the converse may also be true if other social security benefits are highly valued).

Usually employers are responsible for part of the contribution, giving them an incentive to operate out of the system if they see this as a way to reduce labor cost. While the market may eventually require a compensating wage increase for employers who are outside the formal old age system, employers may not perceive this in the short run, or even in the long run if labor markets are imperfect or if they can attract workers who do not place a high value on social security benefits. If employers can keep their labor costs low by staying out of the system, this increases their international competitiveness and consequently the level of employment. Governments must weigh carefully the questions of who will bear the payroll tax if effective coverage is extended, and how high can the tax be to avoid negative consequences on employment. Many developing countries choose a relatively high replacement rate target of 60-70%, which requires a high contribution rate for sustainability. A lower target replacement rate and contribution rate may facilitate coverage, decrease the trade-offs with evasion and unemployment, and therefore be welfare enhancing.

The tighter the linkage between benefits and contributions, the greater the incentive for workers to pay and the less likely that labor costs will rise. However, evasion never completely goes away, because of the high discount rate and liquidity needs of many workers and the perception of employers that the market does not require them to pay higher wages in lieu of contributions.

This discussion suggests that expanded coverage is facilitated by economic growth and higher wages, so the bottom end of the income distribution can think about the future as well as the present. It also suggests that a substantial redistributive component may be needed to increase compliance among low income workers and to make compliance welfare-enhancing. Such redistribution should be explicit (or it may go to the wrong

parties) and a distinction should be made between redistributing to contributors (via social security) and to noncontributors via social assistance (see below). Governments should be particularly careful to avoid perverse redistributions from those outside the system to those inside, while coverage is low.

Redistribution within social security may be achieved by having a very progressive or flat benefit formula in the first pillar (as in the Netherlands) or by introducing a floor or foregoing the usual ceiling on taxable earnings (as in Switzerland) or by providing a minimum pension guarantee (as in Chile and Kazakhstan). In Uruguay, low income contributors to the new funded pillar receive an extra benefit (Queisser, 1998). In Colombia a "solidarity tax" of 1% is imposed on salaries above a specified level and used to finance subsidies to low income contributors (Valdes-Prieto, 1998). These better pay-offs or lower charges may encourage participation and thereby reduce the problem of the uninsured, because they take into account the lower demand and higher opportunity cost among low income workers for formal old age security programs. It may be preferable (and more accurate) to interpret such progressive benefits and charges as stemming from risk differentiation--poor workers are placed into a lower risk category because of their lower expected lifetimes--rather than from redistributive objectives. This line of thought also suggests that broader policies such as the provision of small business credit markets to low income groups may have positive compliance effects on social security by reducing their alternative needs for savings.

However, low income transient workers may not expect to be in the formal sector long enough to qualify for these redistributive benefits, which often require 20-30 years of contributions. Moreover, the political feasibility of these policies, and therefore coverage extension by these means, will be limited by the reluctance of the "haves" to redistribute much to the "have-nots."

The difficulties in collecting from small enterprises and the self-employed. Furthermore, none of these policies are likely to completely solve the evasion problem, in the absence of effective enforcement. Now, enforcement is easier for certain groups than for others. For example it is relatively easy to collect from large companies but more difficult to collect from small enterprises or the self-employed or subsistence agriculture or transient workers. Small enterprises have a short life span; they may come and go before they are registered and taxed. The self-employed, who must pay both the worker's and employer's share, have a double incentive to evade and find it easy to under-report their earnings. Keeping track of transient workers who work irregularly for different employers is a daunting task. These problems exist in industrialized countries as well, but they are multiplied in developing countries where the "difficult" groups are disproportionately large and the government's capacity is weak. Many developing countries do not even try to cover these groups and those that try often fail. For example, the self-employed, who constitute about a third of the labor force, are not covered in Chile (World Bank, 1994, Queisser, 1998). They are covered in Argentina, which is considering excluding them from the mandate because of high evasion. It may be wise for developing countries to concentrate their limited enforcement capacities in those sectors where they are most likely to succeed.

In sum, the “coverage problem” stems from the fact that the high discount rate of low income workers and their reluctance to pay social security taxes may be quite rational, increased coverage may come at the expense of lower take-home pay, higher evasion and lower employment so a careful cost-benefit analysis must be made, and groups that are difficult to monitor predominate in developing countries. Thus, expanding coverage may not be administratively feasible and furthermore, it may not improve society’s welfare unless accompanied by a heavy dose of redistribution—which in turn may not be politically acceptable.

Empirically, we observe that degree of coverage is closely tied to a country’s per capita income (World Bank, 1994, p. 40). Until government’s capacity to enforce tax collections increases, the structure of the economy changes to facilitate this, and the earning capacity of the bottom half of the labor force grows—all of which occurs with the process of economic development—it is difficult and not necessarily desirable to extend contributory social security coverage to the entire population.

Finally, while reform may draw a sharper line between the insured and uninsured, augmenting coverage in the absence of reform would simply aggravate an already unsustainable fiscal situation, increase the implicit pension debt and make reform more difficult. It is essential to put social security on a financially sound basis, which includes a large funded defined contribution component, before expanding coverage.

Are voluntary contributions the answer to the coverage problem?

Some analysts have urged that voluntary contributions be permitted to extend pension insurance to those who don’t have covered jobs. In Japan, men are encouraged to make flat contributions for their wives, in exchange for the promise of a flat benefit. In China, workers in township and village enterprises are subject to social pressure to contribute to their individual accounts, on a “voluntary” basis. Making coverage voluntary avoids the evasion and unemployment problems discussed above. In several countries community organizations such as NGO’s have tried to set up small-scale self-help schemes for informal sector workers (van Ginneken, 1999).

While the availability of voluntary mechanisms is probably utility-improving, I believe we shouldn’t expect them to accomplish very much. After all, a basic reason for the existence of mandatory programs is that many people, especially low income people, will not save much voluntarily for their retirement and the basic reason for limited coverage is that, even when the program is mandatory, many workers and employers will evade making contributions because they believe that participation does not make them better off. In addition, the transactions costs of collecting many small voluntary contributions might be relatively high. Voluntarism and self-help schemes are more likely to succeed in programs when the costs are small and the benefits immediate (as for micro-finance or primary health care). It is likely to be only a small part of the solution to a large long term old age security problem.

In addition, I would offer at least three caveats to this approach: First, if annuities are promised, they should be actuarially fair, except for deliberate redistribution that is planned and funded from the start; otherwise, the voluntary program could explode into a large unfunded unexpected obligation. Second, in an individual account saving plan, workers should be given accurate information about the real rate of return they will receive and the replacement rate it will provide. In China, where some new enterprises have begun to cover workers on a “voluntary” basis, augmented by social pressure, workers have been led to expect a high nominal rate of return based on the assumption of a high rate of inflation. Workers may not realize that this nominal rate will fall if inflation falls. Third, voluntary contributions are likely to be small, at best. In China, the negative real rate of return combined with the small size of the voluntary contributions will not provide much security in old age.

Social assistance and means-testing—outside the contributory system

Thus we are driven to the need for social assistance, and possibly the increased reliance on social assistance, which is largely outside the contributory system, as social security reforms take place. Indeed, most countries have some such social assistance program, aimed at the poorest groups. Key issues that must be dealt with are: How large should the program be? How should it be financed? How is eligibility for assistance determined? Should these criteria be different for the old and the young? How does the availability of noncontributory assistance affect the fiscal sustainability of the contributory program and conversely, how does the structure of a contributory program affect the demands upon social assistance?

How large and how financed? If social assistance is available without the payment of contributions, this may further discourage people from participating in the contributory program. If contributions shrink and evasion increases, while generous social assistance is available, this increases the government’s fiscal problem and may eventually lead to the collapse of the contributory program. The impact on evasion and fiscal sustainability is likely to depend on the generosity of these social assistance programs relative to the redistributions available to low income groups in the contributory program. The latter should be at least as great as the former. So society faces a dilemma: If social assistance benefits are generous they make the contributory program less sustainable; if they are miserly, they leave the uninsured in poverty, even those who had no opportunity to get a covered job. Because of limited enforcement abilities, hence the greater ease of evasion, governments in developing countries face a more difficult trade-off than those in industrialized countries and consequently must offer less generous social assistance to create the right incentives. But, given the low level of wages and contributory pensions for many workers, these “efficient” social assistance pensions may end up below the poverty line.

The negative impact of social assistance on the contributory program is heightened if it is financed out of the social security budget, as in Brazil and Uruguay prior to their recent reforms, where the social security system was charged for beneficiaries who had only five or ten years of contributions. While some amount of redistribution among contributors is

desirable, as discussed above, if contributory social security is required to pay to non-contributors, this increases the tax burden on contributors and their incentive to evade, and hence is ultimately unsustainable. General revenue finance, which has a broader base, is probably preferable, both on efficiency and equity grounds, for redistribution to groups that have not contributed for substantial portions of their working lives. Whether financed out of general revenues or out of a payroll tax, the financial impact of reform on social assistance expenditures should be estimated, in the process of planning the reform.

How to determine eligibility for benefits. Should social assistance benefits be universal, based on objective criteria such as age and absence of a contributory pension, or should they be means-tested, and if so, how should the means-testing be done? Argentina offers an old age pension to workers who don't qualify for regular benefits. It requires only ten years of contributions, a criterion that many (but not all) women and informal sector workers can satisfy. However, the fiscal costs of such programs are potentially high. To keep costs down, benefits are only 19% of the average wage and are not paid until the age of 70 (Ley de Seguridad 24.241; Vittas, 1997). This contrasts with Brazil and Uruguay, where 15 years of contributions are required but benefits are higher, and Chile, where contributions are not required, means-testing is used and benefits are paid at an earlier age (but they are lower). In Chile the size of the pension social assistance budget is predetermined, as is the benefit level. This means that the number of beneficiaries faces a pre-determined constraint. Currently many localities have waiting lists from qualified individuals without access to benefits.

We therefore observe a trade-off between age and income as a test of eligibility, and between ease of access and size of benefits. Given the correlation between income level and longevity, many poor people die before they ever collect in countries that rely primarily on old age as the criterion for eligibility, while many of those who collect are well above the poverty line. But if the over-all budget is inadequate, then even a means-tested system will fail to reach many needy households. (For a discussion of these trade-offs in the contributory program as well see James, 1998).

How to carry out the means test. As noted above, most countries, especially most developing countries, do not offer universal age-based benefits and instead use means-testing for their social assistance, in order to better target their limited resources to the poor. A key element here (besides the over-all budget constraint) is how the means-test is carried out. At least three approaches are available. In the traditional case, individuals apply and their applications are evaluated by government officials. Depending on data availability and country standards, "means" may be defined in terms of income (commonly), assets (as in Australia) or the presence or absence of scarce consumer goods such as water, electricity, and motorcycles in the households (appropriate in developing countries). The corresponding problems: some people may not apply because of ignorance or stigma, bribery may be necessary to get the application processed, criteria may not be applied uniformly, households may behave strategically and disguise their true means, and transactions costs (payments to middle class bureaucrats) may be a high proportion of total expenditures. For example, in several Indian states, old people face lengthy time delays and commission payments that may be needed to get their

applications processed and checks delivered (van Ginneken, 1999). In Thailand, village elders identify the rural poor, mostly widows without children. This system may work well in some villages but one can imagine personal favoritism playing a role in others.

In a less traditional model, the process may be computerized. Based on data from household surveys, poor communities and their residents may be identified and given stipends. This method is being used in the Progres program in Mexico, which targets poor rural villages and families using an econometric model that aggregates several socio-economic variables. The econometric model is structured to give heavy weight to families with children and to provide an incentive for these children to attend school. But old people also benefit—and the relative weights given to school-attending children versus the old becomes a political issue. This approach is worth serious consideration in other countries.

Still a third method of means-testing involves self-selection: offer assistance in a form for which mainly low income people will apply. Self-selection can be achieved by requiring queues for receipt of cash benefits, a cost which high income people are less likely to be willing to incur, or by offering in-kind benefits such as free lunches that only low income people would accept. In many countries soup kitchens and/or dormitories accommodate the poorest old, often run by NGO's but financed by governments. NGO's may provide the service at lower cost and in a less bureaucratic way than the government, particularly when small scale ventures are involved. The advantage of self-selection is that it avoids the transactions costs and possible mis-identification of an application process. The disadvantage is that the benefit and quality level may not be optimal, and many old people may be unable to stand in queues to partake. At this stage, we don't really know which of these three methods entails higher transactions costs or greater exclusion of needy old people.

Old versus young candidates for social assistance. This raises a final issue concerning means-tested programs—should different criteria apply to old versus young people who are poor, and how much priority should be given to poor families with children versus the poor old? These two questions are interrelated.

On the one hand, some analysts argue that eligibility criteria should be more stringent for the young, since they can work, and should be encouraged to try to seek work, while the presumption is that the old cannot work, or have low productivity when they work. The old, therefore, can be offered social assistance without the labor disincentive effects that would be incurred by the young. Of course, the expectation of receiving assistance when old may discourage saving when young, a different type of disincentive problem. In Australia, the young who are unemployed and the old without adequate income and assets are guaranteed the same level of benefits, but with different eligibility criteria regarding efforts to find employment, since the presumption is that the young can work while the old can't. But the government in Australia feared that saving when young might be discouraged by its means and asset-tested age pension, so they recently established a contributory mandatory saving plan for workers. This will eventually

reduce the moral hazard problem regarding saving, leaving different work requirements between the old and young.

On the other hand, one can argue that priority for social assistance should be given to young families with children, who have their entire lives ahead of them. According to this line of thought, children should not be penalized for the failure of their parents to obtain a well-paying job. Helping the children may be a better long term investment for society. Of course, money given to families may not better the condition of the children—this depends on how the marginal income is spent. The Mexican Progresa program is interesting in this regard because it makes school attendance one of the criteria for aid, and the money is given directly to the mother, who has been shown more likely to spend it to enhance the welfare of the children.

The role of the extended family in social assistance programs. In developing countries, where the extended family still survives and multi-generational households are common, a host of other issues arise when social assistance is offered. First, if old and young live together in multi-generational households, the trade-off between them is less. To illustrate: In South Africa a means-tested pension is paid to most older blacks who are living in rural areas. This pension originated in apartheid days and was intended for the small number of urban whites who had failed to accumulate their own private occupational pensions. A much smaller stipend was paid to blacks. But with the elimination of apartheid, the entire black population became eligible for the larger stipend, which has cut-off points and benefit amounts that are very high relative to rural black incomes. Often, family income goes up substantially when a member reaches the eligible age. Since old and young live together in multigenerational households, both groups benefit from the age stipend. But the trade-off is not completely eliminated. The program is very costly and other uses for the money may be more targeted toward the young and may have a greater social pay-off, such as increased spending on education. This is a controversial issue in South Africa today.

Second, when the family support system is strong, it is necessary to determine whether the income and assets of the entire family should count in applying the means-test, or only that of the old person. In Western industrialized societies, the move toward individual responsibility has meant that the government replaces the family as the social safety net and only the individual's means are counted. In contrast, in several Asian societies, such as Hong Kong and Singapore, children have a legal responsibility to take care of their parents, and old people can enforce this legally, albeit at great personal price. In Hong Kong, before the means-tested benefit is paid, children must testify that they are unable to support their parents. China is thinking of adopting a similar system. Indeed, in multi-generational households it may be difficult to separate out the means of the parent and the child, since both share common living arrangements.

Third, how can governments offer assistance while encouraging the continuation of family responsibility? How can penalties and incentives be structured to complement and stimulate, rather than crowd-out, family care? Examples of such incentives include: tax rebates for children who care for their parents in Malaysia; for children who expand their

homes to accommodate parents in Japan, Sweden and Norway; and day care centers or respite care to give caregivers temporary relief in Hong Kong, Singapore, France, Germany and the U.K. (World Bank, 1994). I am not aware of any careful research evaluating the efficacy of these measures. Such research would be worth doing, and such policies may be worth serious consideration by other developing countries.

III. How to Prevent Poverty Among Older Women

Among the old who are poor and uninsured, women are disproportionately represented in most countries. They often lack the labor force participation that would entitle them to contributory benefits, and even if covered, they are usually only “partially insured” because their level of education, wages and years of service were low. They are less likely than men to have inherited property, and in some cultures, assets acquired by women are taken over and owned by men. Their greater longevity means that they are dominant among the very old, who are most likely to be poor, having used up whatever savings they previously accumulated.

The absence of labor force participation and asset ownership among women was part of a traditional family system in which husbands participated in the formal markets and wives worked in the home. Women provided non-monetized services, especially when young, while their monetary needs were supposed to be covered by their spouses and eventually their children. But in many cases this system fails, especially in old age, when women are at the receiving end of the lifetime contract. Marriages break up and the husband is the one with the formal income. Husbands die earlier than wives, with their retirement benefits used up, and often do not leave adequate resources to support the surviving spouse. (For evidence that families do not choose adequate survivors’ insurance, even in countries where this is available, see Auerbach and Kotlikoff, 1991). Children move away or have income problems of their own. In these cases, the monetary support that the family was supposed to provide is not forthcoming and the low personal income of women becomes a social problem.

Social security systems should be designed to address the needs of this group. And I am glad to say that I am working on a project at the World Bank that looks into this issue more carefully. Eventually women are likely to participate more broadly in the labor market and to be covered on their own, but in the meantime it seems reasonable that public policies should ensure that the family support system they counted on when young continues into old age.

Some traditional defined benefit social security systems provide dependents’ and survivors’ benefits to wives of covered workers; the wives are covered by virtue of their husbands’ coverage. But this means that society at large takes responsibility for dependent wives. The benefits to housewives are financed partially by taxes paid and benefits foregone by unmarried men and by wives who participate in the labor market—a high implicit tax that discourages female labor force participation and accentuates the problem.

In the context of multi-pillar systems that are sweeping Latin America, which attempt to link benefits with contributions to avoid such disincentives, the following measures might be considered, to extend the implicit family contract into old age:

- The required purchase of adequate survivors' benefits, during both the working and retirement stage;
- The requirement that men contribute toward the personal accounts of their non-working wives or that mandatory retirement savings be considered the joint property of both spouses;
- Mandatory annuitization, with price indexation, so that the money accumulated in the workers' accounts is not quickly used up and does not fall in real value;
- Mandatory joint annuities, so that the lifetimes of both spouses are covered;
- The use of unisex mortality tables, so that women do not receive lower annual benefits than men because of their greater longevity; this implies a redistribution from men to women that will be controversial and may be difficult to implement in a competitive annuities market;
- Changes in legal arrangements regarding inheritance, property and divorce, that improve the position of women.
- Increased emphasis on female education and labor market equality, to augment the earning power of women.

Measures such as these would take care of the needs of the largest group that is not covered—spouses who have not participated in the labor market for much of their lives—and as such would go far toward eliminating poverty among the uninsured old.

IV. Conclusions

This paper has surveyed the issues that policy makers need to address as they consider how to provide old age protection for the uninsured. While economic growth is the key to higher coverage, good policies may help. The following policy recommendations have emerged:

- Countries should put their social security systems on a financially sustainable basis before expanding coverage. In the meantime, governments should avoid policies that force the uninsured to subsidize the insured.
- Coverage expansion to contributory programs may be encouraged by policies such as: choosing a modest target replacement rate that requires a relatively low contribution rate, charging reduced contribution rates below a specified income threshold, offering low income workers access to low cost benefits such as survivors' insurance (term life insurance) rather than requiring them to take the whole package of benefits, and allowing workers to receive a high (competitive) rate of return on their retirement funds. These policies may reduce the number of "uninsured."
- A close link between benefits and contributions enhances the fiscal sustainability of contributory social security programs and may increase compliance among some groups, but it also means that those who contribute little will receive little; hence the number of

“partially insured” may grow and with it the demands on social assistance. These costs should be taken into account in planning social security reforms.

- Evasion from old age security programs stems partly from myopia, but it is also a rational response to low incomes, short expected lifetimes and absence of effective credit markets that lead to high discount rates for low income groups. For this reason, they are unlikely to contribute much to voluntary programs, and forcing them to contribute on a mandatory basis may not be optimal unless accompanied by substantial redistribution.
- In addition, if employers bear the cost of contributions, the result may be decreased competitiveness and increased unemployment—a serious trade-off in labor-abundant countries. Both evasion and unemployment will be mitigated by low contribution rates and target replacement rates.
- Even where increased coverage is desirable, it may not be feasible, given the limited enforcement capabilities of many governments and the prevalence of small scale and enterprises and self-employment, which are notoriously difficult to monitor, in developing countries. Given that evasion is contagious, it may be better not to cover groups where compliance is likely to be low, and to concentrate enforcement efforts on sectors where the likelihood of success is high. Social assistance should then be provided to low income groups who are not part of the contributory program.
- To avoid negative effects on the contributory program, redistribution via social assistance to the uninsured should not be “too” generous. In particular, it should not be greater than redistribution to the low income groups among the insured. It should be financed out of general revenues.
- Means-testing should be used to target social assistance, but this often entails high transactions costs and potential abuses. Computerized econometric models, self-selection mechanisms, and provision of in-kind benefits by NGO’s (financed by government) are worth serious consideration in lieu of traditional targeting mechanisms.
- Careful consideration should be given to the appropriate balance between social assistance to the old and various types of redistributions (cash transfers, education) to young families with children.
- To the degree possible, public assistance programs for all ages should be structured to encourage rather than displace family assistance. Moreover, the pay-out phase of defined contribution plans should incorporate specific measures to ensure spousal responsibility for the monetary needs of wives who stayed out of the formal labor force because of an implicit lifetime family contract to this effect.

The growth of formal coverage will accompany the process of economic development. Until that happens, a large proportion of the population will be uninsured or partially insured. The recent pension reforms tying benefits more closely to contributions are a step in the right direction for the contributory systems and are a necessary pre-condition for fiscally sound coverage expansion, but they cannot be expected to increase coverage in the short run and may even have the opposite effect. Therefore, they must be accompanied by cost-effective well targeted social assistance programs financed out of general revenues, and by measures that institutionalize the implicit family contract into old age. As Latin American countries consider their second generation of pension reforms, they should be and in some cases are moving in these directions.

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